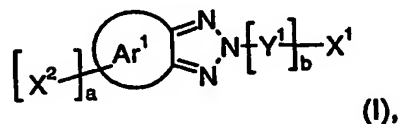


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## Claims

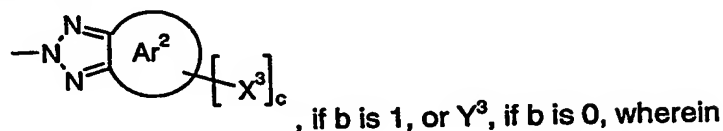
1. An electroluminescent device, comprising a 2H-benzotriazole compound, especially a compound of the formula



a is 0, or 1,

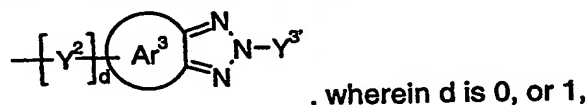
b is 0, or 1,

X<sup>1</sup> is a group of formula



c is 0, or 1

X<sup>2</sup> and X<sup>3</sup> are independently of each other a group of formula

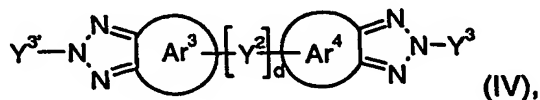
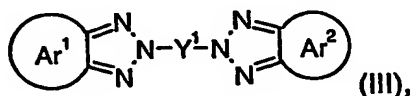
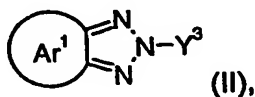


Ar<sup>1</sup>, Ar<sup>2</sup>, and Ar<sup>3</sup> are independently of each other aryl or heteroaryl, which can optionally be substituted, especially C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted,

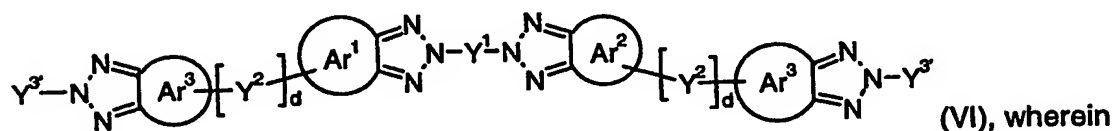
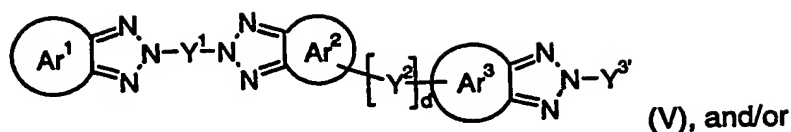
Y<sup>1</sup> and Y<sup>2</sup> are independently of each other a divalent linking group, and

Y<sup>3</sup> and Y<sup>3'</sup> are independently of each other aryl or heteroaryl, which can optionally be substituted, especially C<sub>6</sub>-C<sub>30</sub>aryl or a C<sub>2</sub>-C<sub>26</sub>heteroaryl, which can optionally be substituted.

2. An electroluminescent device according to claim 1, comprising a 2H-benzotriazole compound of the formula



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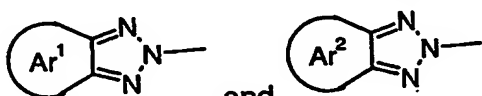
d, Ar¹, Ar², Ar³, Y¹ and Y² are defined as in claim 1,

Ar⁴ stand for C₆-C₃₀aryl or a C₂-C₂₆heteroaryl, which can optionally be substituted,

and

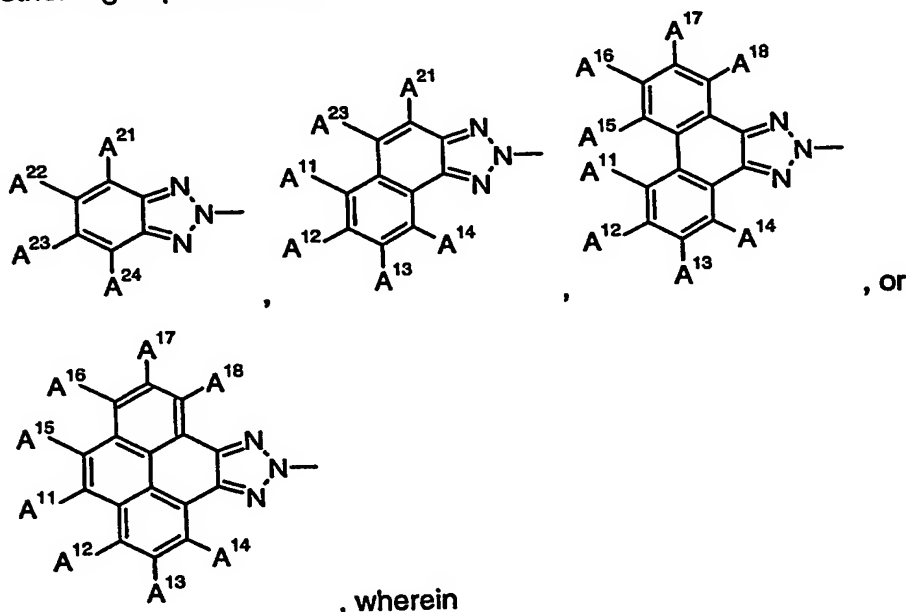
Y³ and Y³' are independently of each other C₆-C₃₀aryl or a C₂-C₂₆heteroaryl, which can optionally be substituted.

3. An electroluminescent device according to claim 2, wherein



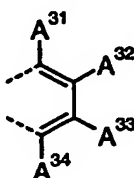
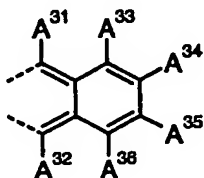
in formula II or III are independently of each

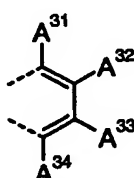
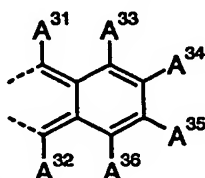
other a group of formula



A²¹, A²², A²³, A²⁴, A¹¹, A¹², A¹³, A¹⁴, A¹⁵, A¹⁶, A¹⁷ and A¹⁸ are independently of each other H, halogen, hydroxy, C₁-C₂₄alkyl, C₁-C₂₄alkyl which is substituted by E and/or interrupted by D, C₁-C₂₄perfluoroalkyl, C₅-C₁₂cycloalkyl, C₅-C₁₂cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR²⁵-, -NR²⁵R²⁶, C₁-C₂₄alkylthio, -PR³² R³², C₅-C₁₂cycloalkoxy, C₅-C₁₂cycloalkoxy which is substituted by E, C₆-C₂₄aryl, C₆-C₂₄aryl which is substituted by E, C₂-C₂₀heteroaryl, C₂-C₂₀heteroaryl which is

substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>, or

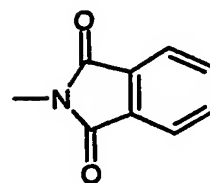
5 A<sup>22</sup> and A<sup>23</sup> or A<sup>11</sup> and A<sup>23</sup> are a group , or , or two groups A<sup>11</sup>, A<sup>12</sup>, A<sup>13</sup>, A<sup>14</sup>, A<sup>15</sup>, A<sup>16</sup>, A<sup>17</sup> and A<sup>18</sup>, which are neighbouring to each

other, are a group , or , wherein A<sup>31</sup>, A<sup>32</sup>, A<sup>33</sup>, A<sup>34</sup>, A<sup>35</sup>, A<sup>36</sup>

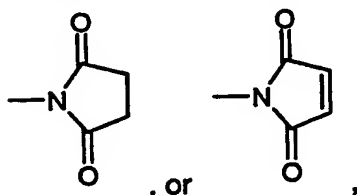
and A<sup>37</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>, D is -CO-; -COO-; -S-; -SO-; -SO<sub>2</sub>-; -O-; -NR<sup>25</sup>-; -SiR<sup>30</sup>R<sup>31</sup>-; -POR<sup>32</sup>-; -CR<sup>23</sup>=CR<sup>24</sup>-; or -C≡C-; and

E is -OR<sup>29</sup>; -SR<sup>29</sup>; -NR<sup>25</sup>R<sup>26</sup>; -COR<sup>28</sup>; -COOR<sup>27</sup>; -CONR<sup>25</sup>R<sup>28</sup>; -CN; -OCOOR<sup>27</sup>; or halogen; wherein

20 R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are independently of each other H; C<sub>6</sub>-C<sub>18</sub>aryl; C<sub>6</sub>-C<sub>18</sub>aryl which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkoxy; C<sub>1</sub>-C<sub>24</sub>alkyl; or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-; or



$R^{25}$  and  $R^{26}$  together form a five or six membered ring, in particular



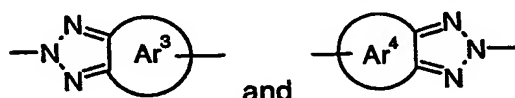
$R^{27}$  and  $R^{28}$  are independently of each other H;  $C_6-C_{18}$ aryl;  $C_6-C_{18}$ aryl which is substituted by  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkoxy;  $C_1-C_{24}$ alkyl; or  $C_1-C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{29}$  is H;  $C_6-C_{18}$ aryl;  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkoxy;  $C_1-C_{24}$ alkyl; or  $C_1-C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{30}$  and  $R^{31}$  are independently of each other  $C_1-C_{24}$ alkyl,  $C_6-C_{18}$ aryl, or  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl, and

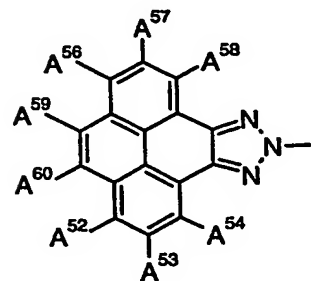
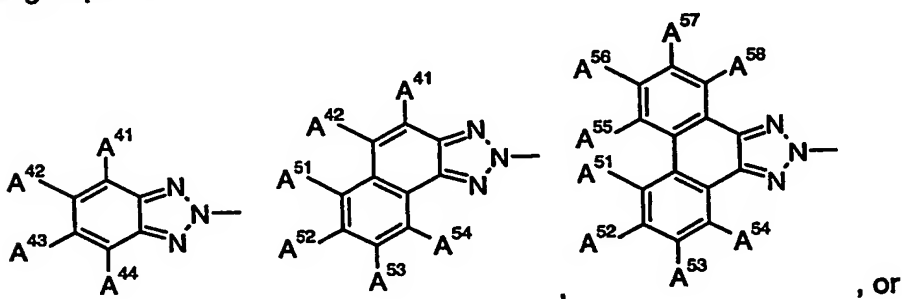
$R^{32}$  is  $C_1-C_{24}$ alkyl,  $C_6-C_{18}$ aryl, or  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl.

4. An electroluminescent device according to claim 2, wherein



in formula IV are independently of each other

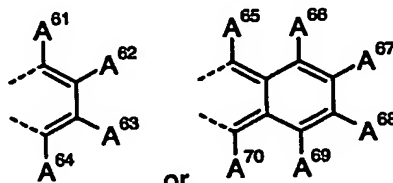
a group of formula



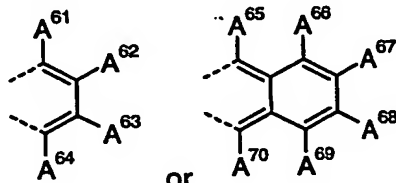
, wherein

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$A^{41}$ ,  $A^{42}$ ,  $A^{43}$ ,  $A^{44}$ ,  $A^{51}$ ,  $A^{52}$ ,  $A^{53}$ ,  $A^{54}$ ,  $A^{55}$ ,  $A^{56}$ ,  $A^{57}$ ,  $A^{58}$ ,  $A^{59}$  and  $A^{60}$  are independently of each other H, halogen, hydroxy,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkyl which is substituted by E and/or interrupted by D,  $C_1$ - $C_{24}$ perfluoroalkyl,  $C_5$ - $C_{12}$ cycloalkyl,  $C_5$ - $C_{12}$ cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or - $NR^{25}$ -,  $NR^{25}R^{26}$ ,  $C_1$ - $C_{24}$ alkylthio, - $PR^{32}R^{32}$ ,  $C_5$ - $C_{12}$ cycloalkoxy,  $C_5$ - $C_{12}$ cycloalkoxy which is substituted by E,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{24}$ alkenyl,  $C_2$ - $C_{24}$ alkynyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkoxy which is substituted by E and/or interrupted by D,  $C_7$ - $C_{25}$ aralkyl,  $C_7$ - $C_{25}$ aralkyl, which is substituted by E,  $C_7$ - $C_{25}$ aralkoxy,  $C_7$ - $C_{25}$ aralkoxy which is substituted by E, or - $CO-R^{28}$ ,  
 or



$A^{42}$  and  $A^{43}$  or  $A^{42}$  and  $A^{51}$  are a group two groups  $A^{51}$ ,  $A^{52}$ ,  $A^{53}$ ,  $A^{54}$ ,  $A^{55}$ ,  $A^{56}$ ,  $A^{57}$ ,  $A^{58}$ ,  $A^{59}$  and  $A^{60}$ , which are neighbouring to



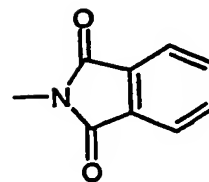
each other, are a group , or , wherein  $A^{61}$ ,  $A^{62}$ ,  $A^{63}$ ,  $A^{64}$ ,  $A^{65}$ ,

$A^{66}$ ,  $A^{67}$ ,  $A^{68}$ ,  $A^{69}$  and  $A^{70}$  are independently of each other H, halogen, hydroxy,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkyl which is substituted by E and/or interrupted by D,  $C_1$ - $C_{24}$ perfluoroalkyl,  $C_5$ - $C_{12}$ cycloalkyl,  $C_5$ - $C_{12}$ cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or - $NR^{25}$ -,  $C_5$ - $C_{12}$ cycloalkoxy,  $C_5$ - $C_{12}$ cycloalkoxy which is substituted by E,  $C_6$ - $C_{24}$ aryl,  $C_6$ - $C_{24}$ aryl which is substituted by E,  $C_2$ - $C_{20}$ heteroaryl,  $C_2$ - $C_{20}$ heteroaryl which is substituted by E,  $C_2$ - $C_{24}$ alkenyl,  $C_2$ - $C_{24}$ alkynyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkoxy which is substituted by E and/or interrupted by D,  $C_7$ - $C_{25}$ aralkyl,  $C_7$ - $C_{25}$ aralkyl, which is substituted by E,  $C_7$ - $C_{25}$ aralkoxy,  $C_7$ - $C_{25}$ aralkoxy which is substituted by E, or - $CO-R^{28}$ ,

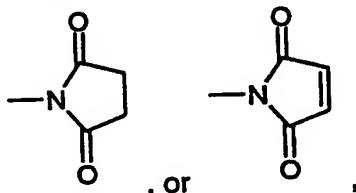
D is - $CO$ -; - $COO$ -; -S-; - $SO$ -; - $SO_2$ -; -O-; - $NR^{25}$ -; - $SiR^{30}R^{31}$ -; - $POR^{32}$ -; - $CR^{23}=CR^{24}$ -; or - $C\equiv C$ -; and

E is - $OR^{29}$ ; - $SR^{29}$ ; - $NR^{25}R^{26}$ ; - $COR^{28}$ ; - $COOR^{27}$ ; - $CONR^{25}R^{26}$ ; -CN; - $OCOOR^{27}$ ; or halogen; wherein

$R^{23}$ ,  $R^{24}$ ,  $R^{25}$  and  $R^{26}$  are independently of each other H;  $C_6$ - $C_{18}$ aryl;  $C_6$ - $C_{18}$ aryl which is substituted by  $C_1$ - $C_{24}$ alkyl, or  $C_1$ - $C_{24}$ alkoxy;  $C_1$ - $C_{24}$ alkyl; or  $C_1$ - $C_{24}$ alkyl which is interrupted by -O-; or



$R^{25}$  and  $R^{26}$  together form a five or six membered ring, in particular



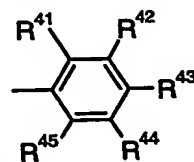
$R^{27}$  and  $R^{28}$  are independently of each other H;  $C_6-C_{18}$ aryl;  $C_6-C_{18}$ aryl which is substituted by  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkoxy;  $C_1-C_{24}$ alkyl; or  $C_1-C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{29}$  is H;  $C_6-C_{18}$ aryl;  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkoxy;  $C_1-C_{24}$ alkyl; or  $C_1-C_{24}$ alkyl which is interrupted by  $-O-$ ,

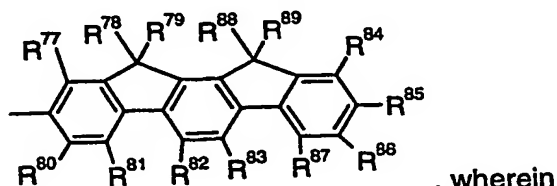
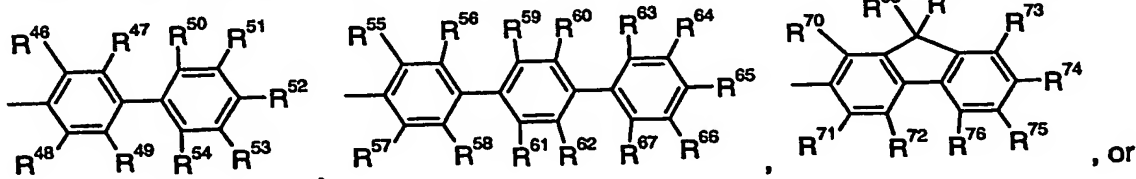
$R^{30}$  and  $R^{31}$  are independently of each other  $C_1-C_{24}$ alkyl,  $C_6-C_{18}$ aryl, or  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl, and

$R^{32}$  is  $C_1-C_{24}$ alkyl,  $C_6-C_{18}$ aryl, or  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl, wherein one of the substituents  $A^{41}$ ,  $A^{42}$ ,  $A^{43}$ ,  $A^{44}$ ,  $A^{51}$ ,  $A^{52}$ ,  $A^{53}$ ,  $A^{54}$ ,  $A^{55}$ ,  $A^{56}$ ,  $A^{57}$ ,  $A^{58}$ ,  $A^{59}$ ,  $A^{60}$ ,  $A^{61}$ ,  $A^{62}$ ,  $A^{63}$ ,  $A^{64}$ ,  $A^{65}$ ,  $A^{66}$ ,  $A^{67}$ ,  $A^{68}$ ,  $A^{69}$  and  $A^{70}$  represents a single bond.

5. An electroluminescent device according to claim 2, 3 or 4, wherein



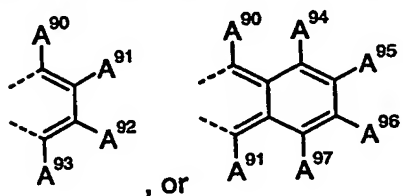
$Y^3$  and  $Y^3$  are independently of each other a group of formula



, wherein  $R^{41}$ ,  $R^{42}$ ,  $R^{43}$ ,  $R^{44}$ ,  $R^{45}$ ,  $R^{46}$ ,  $R^{47}$ ,  $R^{48}$ ,  $R^{49}$ ,  $R^{50}$ ,  $R^{51}$ ,  $R^{52}$ ,  $R^{53}$ ,  $R^{54}$ ,  $R^{55}$ ,  $R^{56}$ ,  $R^{57}$ ,  $R^{58}$ ,  $R^{59}$ ,  $R^{60}$ ,  $R^{61}$ ,  $R^{62}$ ,  $R^{63}$ ,  $R^{64}$ ,  $R^{65}$ ,  $R^{66}$ ,  $R^{67}$ ,  $R^{70}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ ,  $R^{76}$ ,  $R^{77}$ ,  $R^{80}$ ,  $R^{81}$ ,  $R^{82}$ ,  $R^{83}$ ,  $R^{84}$ ,  $R^{85}$ ,  $R^{86}$ , and  $R^{87}$  are independently of each other H,  $C_1-C_{24}$ alkyl, which is

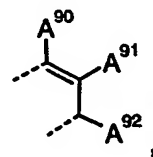
optionally substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>alkenyl, which is optionally substituted by E, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, which is optionally substituted by E, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, which is optionally substituted by E, C<sub>6</sub>-C<sub>18</sub>aryl, which is optionally substituted by E, C<sub>1</sub>-C<sub>24</sub>alkoxy, which is optionally substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>18</sub>aryloxy, which is optionally substituted by E, C<sub>7</sub>-C<sub>18</sub>arylalkoxy, which is optionally substituted by E, C<sub>1</sub>-C<sub>24</sub>alkylthio, which is optionally substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>alkylselenium, which is optionally substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>alkyltellurium, which is optionally substituted by E and/or interrupted by D, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, or C<sub>6</sub>-C<sub>18</sub>aralkyl, which is optionally substituted by E, or

two groups R<sup>41</sup>, R<sup>42</sup>, R<sup>43</sup>, R<sup>44</sup>, R<sup>45</sup>, R<sup>46</sup>, R<sup>47</sup>, R<sup>48</sup>, R<sup>49</sup>, R<sup>50</sup>, R<sup>51</sup>, R<sup>52</sup>, R<sup>53</sup>, R<sup>54</sup>, R<sup>55</sup>, R<sup>56</sup>, R<sup>57</sup>, R<sup>58</sup>, R<sup>59</sup>, R<sup>60</sup>, R<sup>61</sup>, R<sup>62</sup>, R<sup>63</sup>, R<sup>64</sup>, R<sup>65</sup>, R<sup>66</sup>, R<sup>67</sup>, R<sup>70</sup>, R<sup>71</sup>, R<sup>72</sup>, R<sup>73</sup>, R<sup>74</sup>, R<sup>75</sup>, R<sup>76</sup>, R<sup>77</sup>, R<sup>80</sup>, R<sup>81</sup>, R<sup>82</sup>, R<sup>83</sup>, R<sup>84</sup>, R<sup>85</sup>, R<sup>86</sup>, and R<sup>87</sup>, which are neighbouring to each other, are a group



, or , wherein A<sup>90</sup>, A<sup>91</sup>, A<sup>92</sup>, A<sup>93</sup>, A<sup>94</sup>, A<sup>95</sup>, A<sup>96</sup> and A<sup>97</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>, R<sup>68</sup>, R<sup>69</sup>, R<sup>78</sup>, R<sup>79</sup>, R<sup>88</sup> and R<sup>89</sup> are independently of each other C<sub>1</sub>-C<sub>18</sub> alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, or C<sub>7</sub>-C<sub>25</sub>aralkyl, or R<sup>68</sup> and R<sup>69</sup>, R<sup>78</sup> and R<sup>79</sup>, and/or R<sup>88</sup> and R<sup>89</sup> form a ring, especially a five- or six-membered ring, or

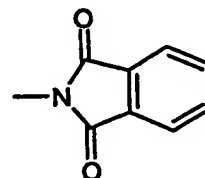
R<sup>68</sup> and R<sup>70</sup>, R<sup>69</sup> and R<sup>73</sup>, R<sup>77</sup> and R<sup>78</sup> and/or R<sup>84</sup> and R<sup>89</sup> are a group



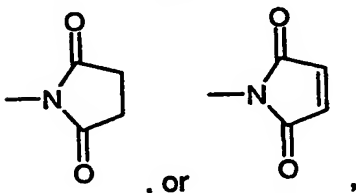
D is  $-\text{CO}-$ ;  $-\text{COO}-$ ;  $-\text{S}-$ ;  $-\text{SO}-$ ;  $-\text{SO}_2-$ ;  $-\text{O}-$ ;  $-\text{NR}^{25}-$ ;  $-\text{SiR}^{30}\text{R}^{31}-$ ;  $-\text{POR}^{32}-$ ;  $-\text{CR}^{23}=\text{CR}^{24}-$ ; or  $-\text{C}\equiv\text{C}-$ ; and

E is  $-\text{OR}^{29}$ ;  $-\text{SR}^{29}$ ;  $-\text{NR}^{25}\text{R}^{26}$ ;  $-\text{COR}^{28}$ ;  $-\text{COOR}^{27}$ ;  $-\text{CONR}^{25}\text{R}^{26}$ ;  $-\text{CN}$ ;  $-\text{OCOOR}^{27}$ ; or halogen; wherein

$\text{R}^{23}$ ,  $\text{R}^{24}$ ,  $\text{R}^{25}$  and  $\text{R}^{26}$  are independently of each other H;  $\text{C}_6\text{-C}_{18}\text{aryl}$ ;  $\text{C}_6\text{-C}_{18}\text{aryl}$  which is substituted by  $\text{C}_1\text{-C}_{24}\text{alkyl}$ , or  $\text{C}_1\text{-C}_{24}\text{alkoxy}$ ;  $\text{C}_1\text{-C}_{24}\text{alkyl}$ ; or  $\text{C}_1\text{-C}_{24}\text{alkyl}$  which is interrupted by  $-\text{O}-$ ; or



$\text{R}^{25}$  and  $\text{R}^{26}$  together form a five or six membered ring, in particular



$\text{R}^{27}$  and  $\text{R}^{28}$  are independently of each other H;  $\text{C}_6\text{-C}_{18}\text{aryl}$ ;  $\text{C}_6\text{-C}_{18}\text{aryl}$  which is substituted by  $\text{C}_1\text{-C}_{24}\text{alkyl}$ , or  $\text{C}_1\text{-C}_{24}\text{alkoxy}$ ;  $\text{C}_1\text{-C}_{24}\text{alkyl}$ ; or  $\text{C}_1\text{-C}_{24}\text{alkyl}$  which is interrupted by  $-\text{O}-$ ,

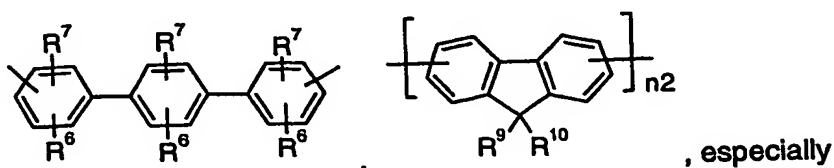
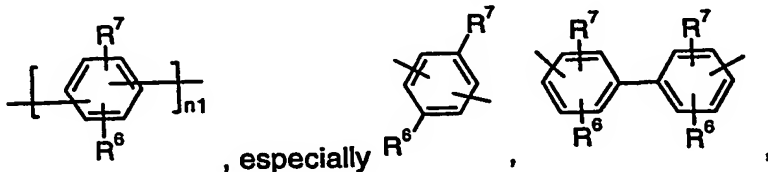
$\text{R}^{29}$  is H;  $\text{C}_6\text{-C}_{18}\text{aryl}$ ;  $\text{C}_6\text{-C}_{18}\text{aryl}$ , which is substituted by  $\text{C}_1\text{-C}_{24}\text{alkyl}$ , or  $\text{C}_1\text{-C}_{24}\text{alkoxy}$ ;  $\text{C}_1\text{-C}_{24}\text{alkyl}$ ; or  $\text{C}_1\text{-C}_{24}\text{alkyl}$  which is interrupted by  $-\text{O}-$ ,

$\text{R}^{30}$  and  $\text{R}^{31}$  are independently of each other  $\text{C}_1\text{-C}_{24}\text{alkyl}$ ,  $\text{C}_6\text{-C}_{18}\text{aryl}$ , or  $\text{C}_6\text{-C}_{18}\text{aryl}$ , which is substituted by  $\text{C}_1\text{-C}_{24}\text{alkyl}$ , and

$\text{R}^{32}$  is  $\text{C}_1\text{-C}_{24}\text{alkyl}$ ,  $\text{C}_6\text{-C}_{18}\text{aryl}$ , or  $\text{C}_6\text{-C}_{18}\text{aryl}$ , which is substituted by  $\text{C}_1\text{-C}_{24}\text{alkyl}$ .

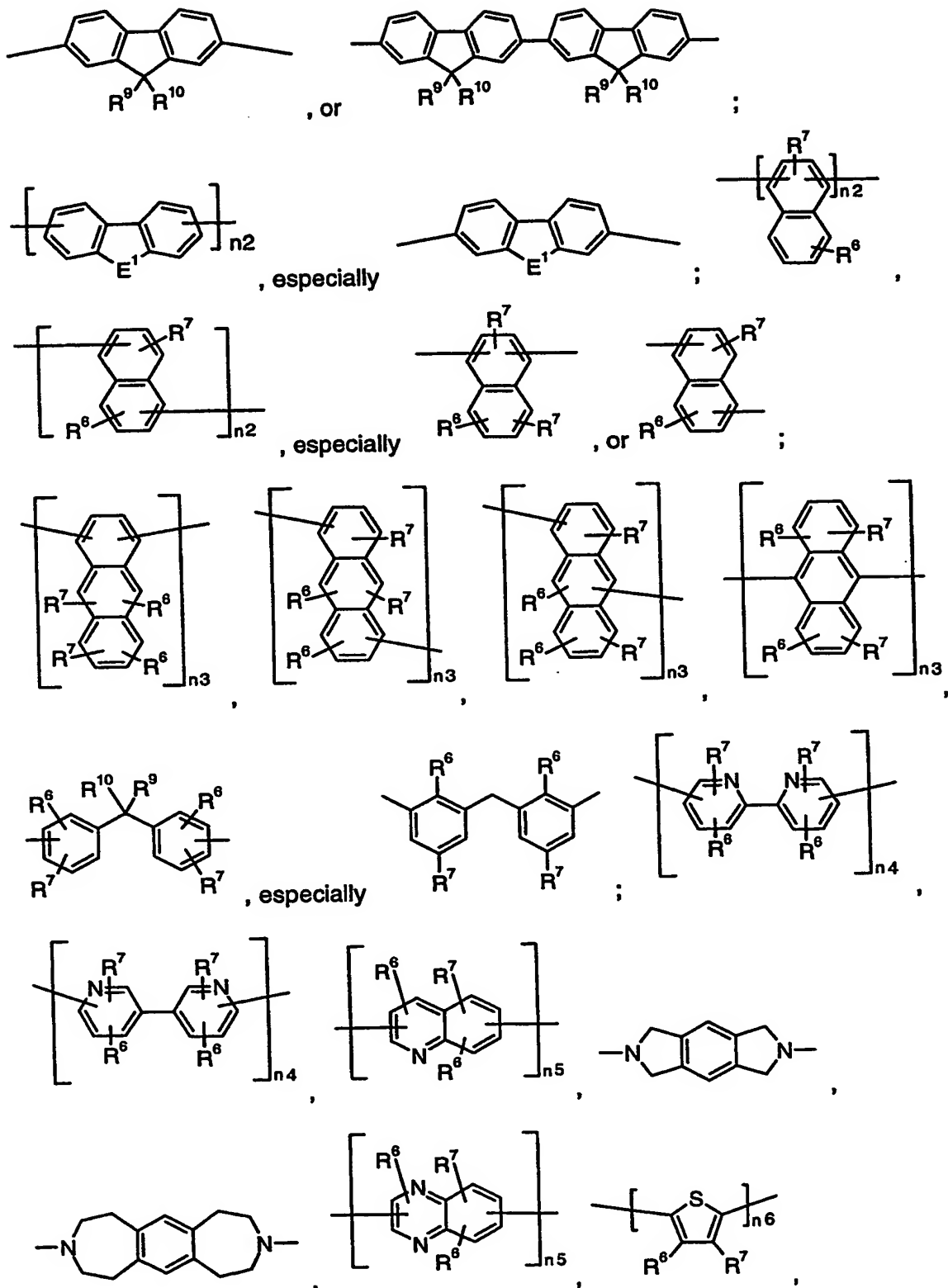
6. An electroluminescent device according to any of claims 1 to 5, wherein

$\text{Y}^1$  and  $\text{Y}^2$  are independently of each other

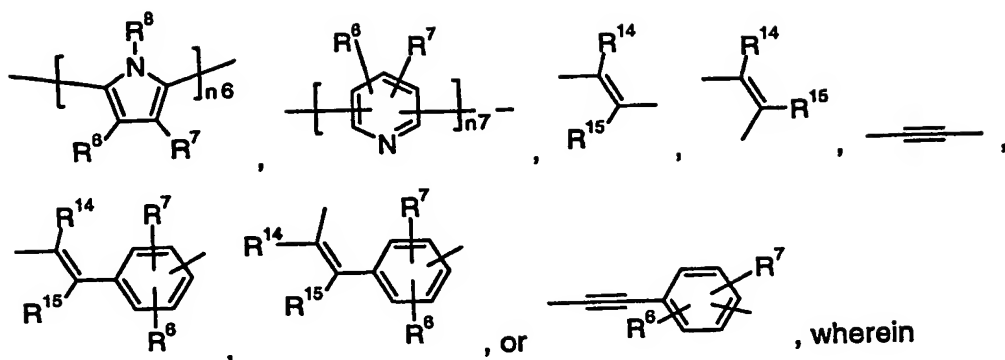




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$n_1, n_2, n_3, n_4, n_5, n_6$  and  $n_7$  are 1, 2, or 3, in particular 1,

$E^1$  is -S-, -O-, or -NR<sup>25</sup>-, wherein R<sup>25</sup> is C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>6</sub>-C<sub>10</sub>aryl,

R<sup>6</sup> and R<sup>7</sup> are independently of each other H, halogen, hydroxy, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>1</sub>-C<sub>24</sub>perfluoroalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl which is substituted by E and/or interrupted by S-, -O-, or -NR<sup>25</sup>-, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy which is substituted by E, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, C<sub>7</sub>-C<sub>25</sub>aralkyl, C<sub>7</sub>-C<sub>25</sub>aralkyl, which is substituted by E, C<sub>7</sub>-C<sub>25</sub>aralkoxy, C<sub>7</sub>-C<sub>25</sub>aralkoxy which is substituted by E, or -CO-R<sup>28</sup>, R<sup>8</sup> is C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, or C<sub>7</sub>-C<sub>25</sub>aralkyl,

R<sup>9</sup> and R<sup>10</sup> are independently of each other C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E, C<sub>2</sub>-C<sub>24</sub>alkenyl, C<sub>2</sub>-C<sub>24</sub>alkynyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkoxy which is substituted by E and/or interrupted by D, or C<sub>7</sub>-C<sub>25</sub>aralkyl, or

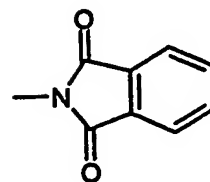
R<sup>9</sup> and R<sup>10</sup> form a ring, especially a five- or six-membered ring,

R<sup>14</sup> and R<sup>15</sup> are independently of each other H, C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkyl which is substituted by E and/or interrupted by D, C<sub>6</sub>-C<sub>24</sub>aryl, C<sub>6</sub>-C<sub>24</sub>aryl which is substituted by E, C<sub>2</sub>-C<sub>20</sub>heteroaryl, or C<sub>2</sub>-C<sub>20</sub>heteroaryl which is substituted by E,

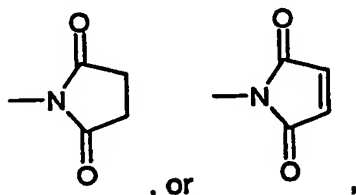
D is -CO-, -COO-, -S-, -SO-, -SO<sub>2</sub>-, -O-, -NR<sup>25</sup>-, -SiR<sup>30</sup>R<sup>31</sup>-, -POR<sup>32</sup>-, -CR<sup>23</sup>=CR<sup>24</sup>-, or -C≡C-, and

E is -OR<sup>29</sup>-, -SR<sup>29</sup>-, -NR<sup>25</sup>R<sup>26</sup>-, -COR<sup>28</sup>-, -COOR<sup>27</sup>-, -CONR<sup>25</sup>R<sup>26</sup>-, -CN, -OCOOR<sup>27</sup>-, or halogen, wherein

R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are independently of each other H, C<sub>6</sub>-C<sub>18</sub>aryl, C<sub>6</sub>-C<sub>18</sub>aryl which is substituted by C<sub>1</sub>-C<sub>24</sub>alkyl, C<sub>1</sub>-C<sub>24</sub>alkoxy, C<sub>1</sub>-C<sub>24</sub>alkyl, or C<sub>1</sub>-C<sub>24</sub>alkyl which is interrupted by -O-, or



$R^{25}$  and  $R^{26}$  together form a five or six membered ring, in particular



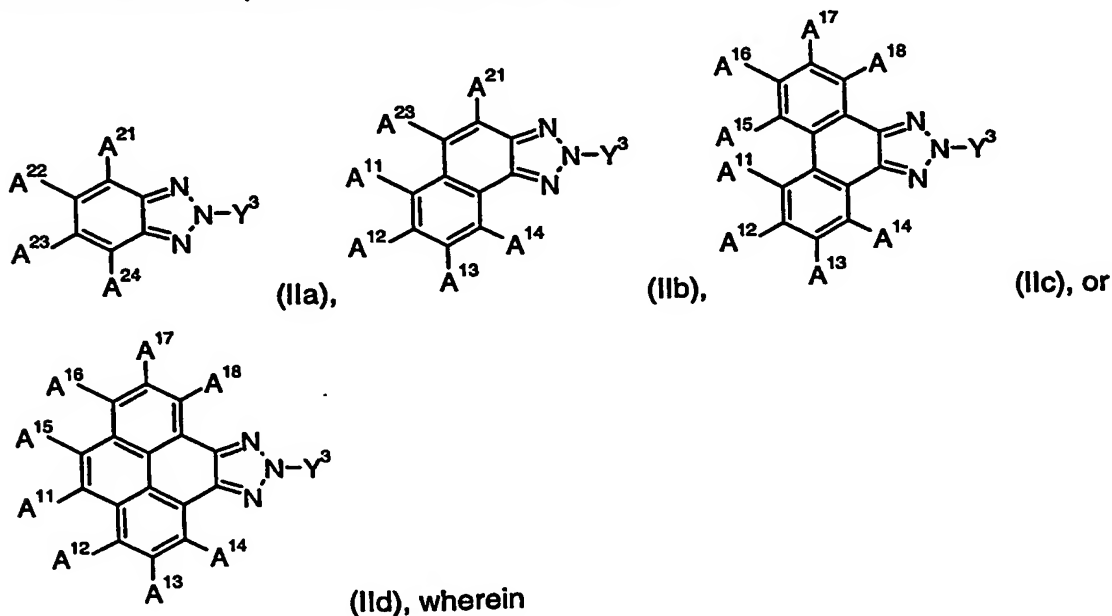
$R^{27}$  and  $R^{28}$  are independently of each other H,  $C_6-C_{18}$ aryl,  $C_6-C_{18}$ aryl which is substituted by  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkoxy,  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{29}$  is H,  $C_6-C_{18}$ aryl,  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl,  $C_1-C_{24}$ alkoxy,  $C_1-C_{24}$ alkyl, or  $C_1-C_{24}$ alkyl which is interrupted by  $-O-$ ,

$R^{30}$  and  $R^{31}$  are independently of each other  $C_1-C_{24}$ alkyl,  $C_6-C_{18}$ aryl, or  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl, and

$R^{32}$  is  $C_1-C_{24}$ alkyl,  $C_6-C_{18}$ aryl, or  $C_6-C_{18}$ aryl, which is substituted by  $C_1-C_{24}$ alkyl.

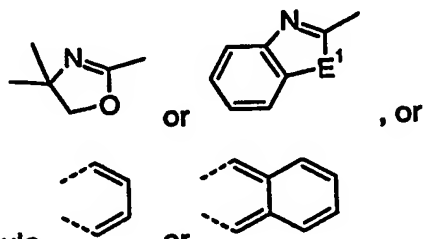
7. An electroluminescent device according to claim 2, 3, or 5, wherein the 2H-benzotriazole compound is a compound of formula



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$A^{21}$ ,  $A^{22}$ ,  $A^{23}$  and  $A^{24}$  are independently of each other hydrogen, halogen,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ perfluoroalkyl,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ -

$C_{10}$ heteroaryl, especially a group of formula



$A^{22}$  and  $A^{23}$  or  $A^{11}$  and  $A^{23}$  are a group of formula

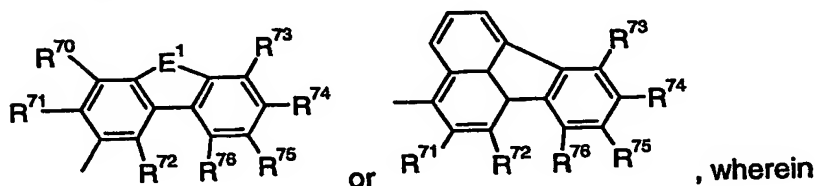
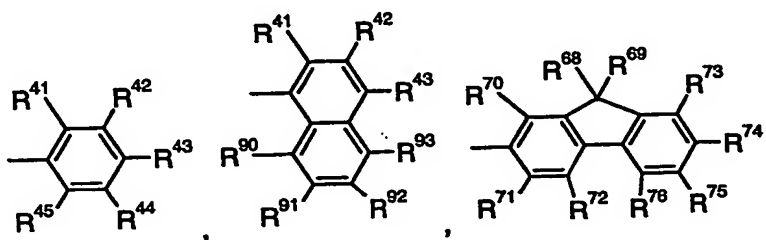
5

$A^{11}$ ,  $A^{12}$ ,  $A^{13}$ ,  $A^{14}$ ,  $A^{15}$ ,  $A^{16}$ ,  $A^{17}$ , and  $A^{18}$  are independently of each other H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ - $C_{10}$ heteroaryl, wherein

$R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_7$ - $C_{18}$ aralkyl, or  $C_1$ - $C_{24}$ alkyl,  $R^{27}$  is  $C_1$ - $C_{24}$ alkyl, and

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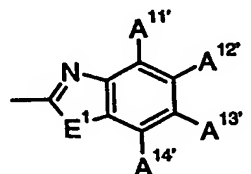
$Y^3$  is a group of formula



$R^{41}$  is hydrogen,  $C_1$ - $C_{24}$ alkoxy, or  $OC_7$ - $C_{18}$ aralkyl,

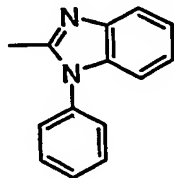
$R^{42}$  is hydrogen, or  $C_1$ - $C_{24}$ alkyl,

$R^{43}$  is hydrogen, halogen,  $-CONR^{25}R^{26}$ ,  $-COOR^{27}$ ,

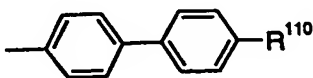


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especially



, or

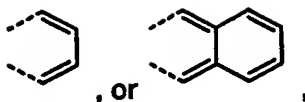


, wherein

$E^1$  is  $-S-$ ,  $-O-$ , or  $-NR^{25}-$ , wherein  $R^{25}$  is  $C_1$ - $C_{24}$ alkyl, or  $C_6$ - $C_{10}$ aryl,

$R^{110}$  is H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or

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$R^{42}$  and  $R^{43}$  are a group of formula

$R^{44}$  is hydrogen, or  $C_1$ - $C_{24}$ alkyl,

$R^{45}$  is hydrogen, or  $C_1$ - $C_{24}$ alkyl,

$A^{11'}$ ,  $A^{12'}$ ,  $A^{13'}$ , and  $A^{14'}$  are independently of each other H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ -

$C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ ,

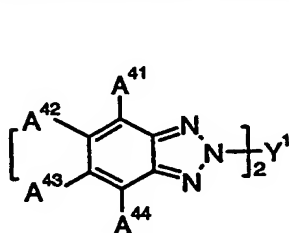
$R^{68}$  and  $R^{69}$  are independently of each other  $C_1$ - $C_{24}$ alkyl, especially  $C_4$ - $C_{12}$ alkyl, especially hexyl, heptyl, 2-ethylhexyl, and octyl, which can be interrupted by one or two oxygen atoms,

$R^{70}$ ,  $R^{71}$ ,  $R^{72}$ ,  $R^{73}$ ,  $R^{74}$ ,  $R^{75}$ ,  $R^{76}$ ,  $R^{90}$ ,  $R^{91}$ ,  $R^{92}$ , and  $R^{93}$  are independently of each other H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_6$ - $C_{10}$ aryl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ ,

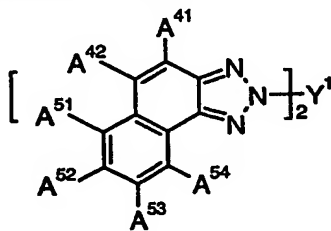
$R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_7$ - $C_{18}$ aralkyl, or  $C_1$ - $C_{24}$ alkyl, and

$R^{27}$  is  $C_1$ - $C_{24}$ alkyl.

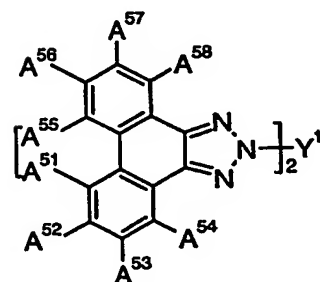
8. An electroluminescent device according to claim 2, 3, or 6, wherein the 2H-benzotriazole compound is a compound of formula



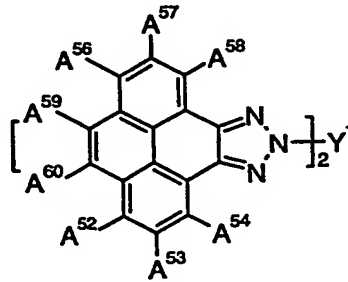
(IIIa),



(IIIb),



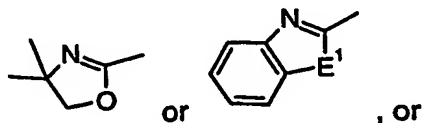
(IIIc), or



(IIId), wherein

$A^{41}$ ,  $A^{42}$ ,  $A^{43}$  and  $A^{44}$  are independently of each other hydrogen, halogen,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ perfluoroalkyl,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CO NR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ -

$C_{10}$ heteroaryl, especially a group of formula



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$A^{42}$  and  $A^{43}$  are a group of formula

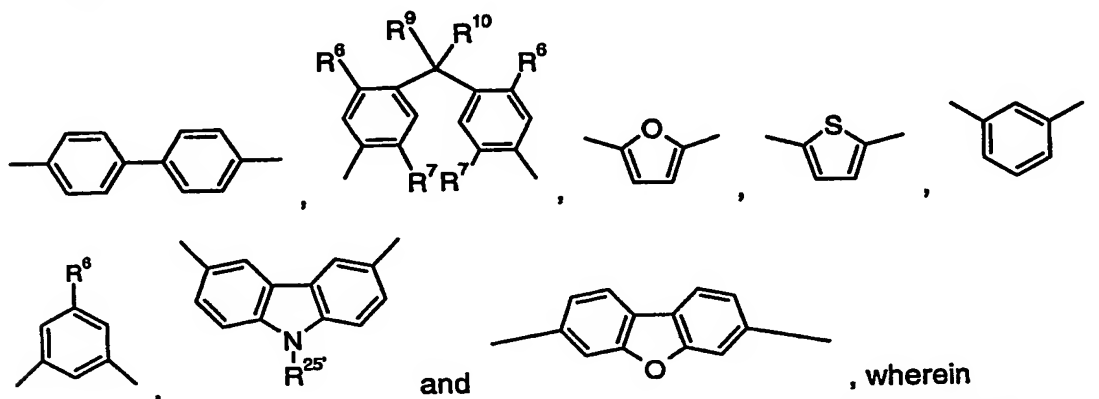
$A^{51}$ ,  $A^{52}$ ,  $A^{53}$ ,  $A^{54}$ ,  $A^{55}$ ,  $A^{56}$ ,  $A^{57}$ ,  $A^{58}$ ,  $A^{59}$  and  $A^{60}$  are independently of each other H, CN,  $C_1$ - $C_{24}$ alkyl,  $C_1$ - $C_{24}$ alkoxy,  $C_1$ - $C_{24}$ alkylthio,  $C_6$ - $C_{18}$ aryl,  $-NR^{25}R^{26}$ ,  $-CONR^{25}R^{26}$ , or  $-COOR^{27}$ , or  $C_2$ - $C_{10}$ heteroaryl, wherein

$E^1$  is O, S, or  $-NR^{25'}$ ,

$R^{25}$  and  $R^{26}$  are independently of each other H,  $C_6$ - $C_{18}$ aryl,  $C_7$ - $C_{18}$ aralkyl, or  $C_1$ - $C_{24}$ alkyl,

$R^{27}$  is  $C_1$ - $C_{24}$ alkyl, and

$Y^1$  is a group of formula



and , wherein

$R^6$  is  $C_1$ - $C_{24}$ alkoxy, or  $-O$ - $C_7$ - $C_{25}$ aralkyl,  $R^7$  is H, or  $C_1$ - $C_{24}$ alkyl,  $R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{24}$ alkyl, especially  $C_4$ - $C_{12}$ alkyl, which can be interrupted by one or two oxygen atoms, and

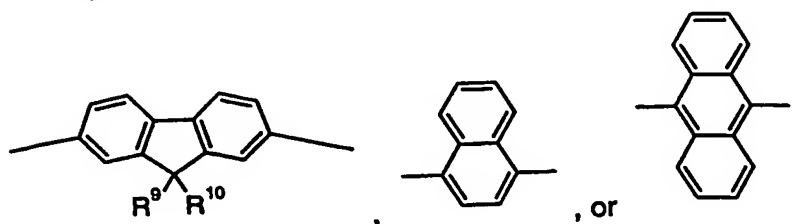
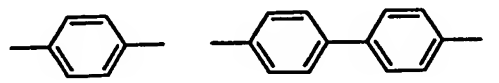
$R^{25'}$  is  $C_1$ - $C_{24}$ alkyl, or  $C_6$ - $C_{10}$ aryl.

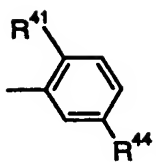
9. An electroluminescent device according to claim 2, 4, 5 or 6, wherein the 2H-benzotriazole compound is a compound of formula



(VIa), wherein d is 0, or 1,

$Y^2$  is a group of formula  $-O-$ ,  $-S-$ ,  $-NR^{25'}$ ,





$Y^3$  is a group of formula

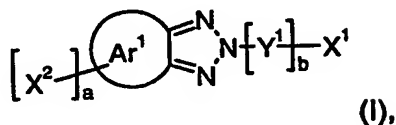
$R^9$  and  $R^{10}$  are independently of each other  $C_1$ - $C_{24}$ alkyl, especially  $C_4$ - $C_{12}$ alkyl, which can be interrupted by one or two oxygen atoms,

$R^{25}$  is H,  $C_6$ - $C_{18}$ aryl,  $C_7$ - $C_{18}$ aralkyl, or  $C_1$ - $C_{24}$ alkyl,

$R^{41}$  is  $C_1$ - $C_{24}$ alkoxy, or  $C_7$ - $C_{15}$ phenylalkoxy, and

$R^{44}$  is H, or  $C_1$ - $C_{24}$ alkyl.

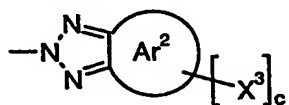
10. A 2H-benzotriazole compound of the formula



$a$  is 0, or 1,

$b$  is 0, or 1,

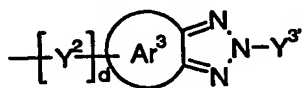
$X^1$  is a group of formula



, if  $b$  is 1, or  $Y^3$ , if  $b$  is 0, wherein

$c$  is 0, or 1

$X^2$  and  $X^3$  are independently of each other a group of formula



, wherein  $d$  is 0, or 1,

$Ar^1$ ,  $Ar^2$ , and  $Ar^3$  are independently of each other aryl or heteroaryl, which can optionally be substituted, especially  $C_6$ - $C_{30}$ aryl or a  $C_2$ - $C_{26}$ heteroaryl, which can optionally be substituted,

$Y^1$  and  $Y^2$  are independently of each other a divalent linking group, and

$Y^3$  and  $Y^3$  are independently of each other aryl or heteroaryl, which can optionally be substituted, especially  $C_6$ - $C_{30}$ aryl or a  $C_2$ - $C_{26}$ heteroaryl, which can optionally be substituted.